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Agency

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www.epa.gov/etv
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EPA

ETV

Environmental Technology Verification (ETV) Program

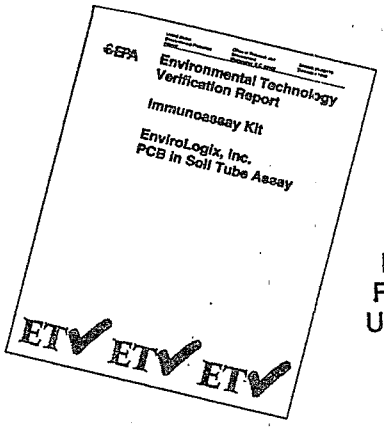
Site Characterization and Monitoring Technologies Pilot

About the Environmental Technology Verification Program and the Site Characterization and Monitoring Technologies Pilot

The Environmental Technology Verification Program is a service of the Environmental Protection Agency designed to accelerate the development and commercialization of improved environmental technology through third party verification and reporting of performance. The goal of ETV is to verify the performance characteristics of commercial-ready environmental technologies through the evaluation of objective and quality-assured data so that potential purchasers and permitters are provided with an independent and credible assessment of the technology that they are buying or permitting. ETV is intended to expand the environmental technology choices of public and private decision-makers, both in our country and abroad.

ETV is a voluntary program that seeks to make objective performance information available to all of the actors in the environmental marketplace for their consideration and to assist them in making informed technology decisions. ETV does not rank technologies nor compare their performance, label or list technologies as acceptable or unacceptable, nor seek to determine "best available technology", nor approve or disapprove technologies. The program does not evaluate technologies at the bench- or pilot-scale and does not conduct or support research.

Visit the Pilot home page **http://www.epa.gov/etv**



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Upcoming Verification Areas

Verification testing is under way, or soon to be under way, in a number of environmental monitoring technology categories that include:

- Groundwater Sampling
- TPH Test Kits
- Geophysics
- Explosives Test Kits

For More Information on the Site Characterization and Monitoring Technologies Pilot:

http://www.epa.gov/etv
or
http://clu-in.org/char1.htm
or
http://www.ornl.gov/etv

Or Contact:

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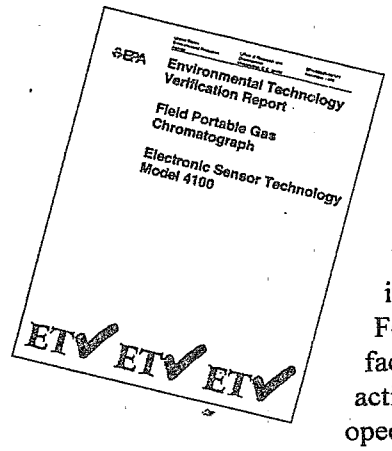
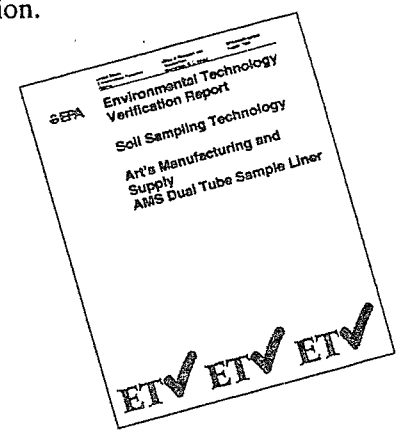


The program now operates twelve pilots covering a broad range of environmental areas. ETV has begun with a 5-year pilot phase (1995-2000) to test a wide range of partner and procedural alternatives in various pilot areas, as well as the true market demand for and response to such a program. In these pilots, EPA utilizes the expertise of partner "verification organization" to design efficient processes for conducting performance tests of innovative technologies. EPA has selected its partners from both the public and private sectors including Federal laboratories, states, industry consortia and private sector facilities. Verification organizations oversee and report verification activities based on testing and quality assurance protocols developed with input from all major stakeholder/customer groups associated with the technology area.

The Site Characterization and Monitoring Technologies (SCMT) Pilot is one of twelve pilots operating under ETV. The U.S. EPA National Exposure Research Laboratory Environmental Sciences Division in Las Vegas manages the pilot. Their partners (Verification Organizations) are the U.S. Department of Energy's Oak Ridge National Laboratory and Sandia National Laboratories. The SCMT Pilot conducts verification testing of environmental characterization and monitoring technologies. Commercial-ready technologies are evaluated to provide potential technology users and permitters with an independent and credible assessment of technology performance. The verification process includes the development of formal test protocols, on-site field testing, and data evaluation. One of the end products of the verification process is an Environmental Technology Verification Report (ETVR). The ETVR contains a Verification Statement that is signed by EPA and the Verification Organization.

Verification Process



Each technology demonstration follows a similar process that includes the steps listed below.

- Identification of user-community needs
- Solicitation and selection of technology
- Planning of demonstration
- Field demonstration
- Reporting of results
- Information dissemination

Verification Reports

Cone Penetrometer/Laser Induced Fluorescence

The Site Characterization and Analysis Penetrometer System (SCAPS) LIF Sensor and Support System	EPA 600-R-97-019
The Rapid Optical Screening Tool (ROST) LIF System for Screening of Petroleum Hydrocarbons in Subsurface Soils	EPA 600-R-97-020

Field Portable Gas Chromatograph/Mass Spectrometers

Field Portable GC/MS; Viking Instruments Corporation SpectraTrak™ 672	EPA 600-R-97-148
Field Portable GC/MS; Bruker-Franzen Analytical Systems, Inc. EM640™	EPA 600-R-97-149

Field Portable X-Ray Fluorescence Analyzers

Field Portable XRF Analyzer; Scitec MAP Spectrum Analyzer	EPA 600-R-97-147
Field Portable XRF Analyzer; HNU Systems SEFA-P Analyzer	EPA 600-R-97-144
Field Portable XRF Analyzer; TN 9000 and TN Lead Analyzer	EPA 600-R-97-145
Field Portable XRF Analyzer; Metorex X-MET 920-MP	EPA 600-R-97-151
Field Portable XRF Analyzer; Metorex X-MET 920-P and X-MET 940	EPA 600-R-97-146
Field Portable XRF Analyzer; Niton XL Spectrum Analyzer	EPA 600-R-97-150

Field Analytical Methods for Measuring Polychlorinated Biphenyls (PCBs)

EnviroGard PCB Test Kit; Strategic Diagnostics Inc.	EPA 600-R-98-113
4100 Vapor Detector; Electronic Sensor Technology	EPA 600-R-98-114
PCB in Soil Tube Assay; EnviroLogix, Inc.	EPA 600-R-98-173
RaPID Assay System for PCB Analysis; Strategic Diagnostics Inc.	EPA 600-R-98-111
L2000 PCB/Chloride Analyzer; Dexsil Corporation	EPA 600-R-98-109
D Tech PCB Test Kit; Strategic Diagnostics Inc.	EPA 600-R-98-112
PCB Immunoassay Kit; Hach Company	EPA 600-R-98-110

Soil Gas/Soil Gas Sampling Technologies

AMS Dual Tube Liner Sampler; Art's Manufacturing and Supply	EPA 600-R-98-093
JMC Environmentalist's Subsoil Probe; Clements Associates, Inc.	EPA 600-R-98-091
EMFLUX Soil Investigation System; Quadrel Services, Inc.	EPA 600-R-98-096
Gore-Sorber Screening Survey Passive Soil Gas Sampling System; W.L. Gore & Associates EPA 600-R-98-095	
Core Barrel Sampler; Simulprobe Technologies, Inc.	EPA 600-R-98-094
Large Bore Soil Sampler; Geoprobe Systems, Inc.	EPA 600-R-98-092

Well-head Monitoring/Measurement of Volatile Organic Compounds (VOCs) in Water

Model 4100; Electronic Sensor Technology	EPA 600-R-98-141
HAPSITE with Headspace Sampling Accessory; Inficon, Inc.	EPA 600-R-98-142
Type 1312 Multi-gas Monitor; Innova AirTech Instruments	EPA 600-R-98-143
Voyager; Perkin-Elmer Corporation (Photovac Monitoring Instruments)	EPA 600-R-98-144
Scentograph Plus II; Sentex Systems, Inc.	EPA 600-R-98-145